

**ABSTRACT**

A ball mill is provided with an agitator and comprises a grinding chamber containing grinding medium, a stator and a rotor which are arranged in said grinding chamber, an input opening for material to be ground and an output opening for ground material which are used for bringing the material to be ground to the grinding chamber and for evacuating the ground material therefrom. The mill also comprises a device for separating the grinding medium arranged in the grinding chamber above the output opening. The rotor is embodied in the form of a rotational symmetry body, and the stator is formed by an internal surface which is complementary to the grinding chamber. The inventive rotor and the stator are provided with pins which are distributed through all surface thereof and projected to the grinding chamber.